

## Title (en)

Preparation containing aramide fibers and their use.

## Title (de)

Präparationshaltige Aramidfasern und deren Verwendung.

## Title (fr)

Préparation contenant des fibres aramides et leur emploi.

## Publication

**EP 0665323 A3 19970820 (DE)**

## Application

**EP 95100370 A 19950112**

## Priority

DE 4402193 A 19940126

## Abstract (en)

[origin: DE4402193C1] Aramid fibres contain 0.5-4 wt.% of a prepn. (1) contg. (A) anionic antistatic based on a salt of a mono- or di-alkyl phosphate or mono- or di-aryl phosphate ester, a salt of an alkyl- or aryl-phosphonic acid ester, or a mixt. thereof, (B) a cpd. of formula  $R_{<1>-}COO-(CH_2-CH_2-O)_x-R_{<2>-}$  (I) and (C) a cpd. of formula  $R_{<3>-}O-(R_{<4>-}O)_y-R_{<5>-}$  (II). In formulae,  $R_{<1>-}$  = 1-22C alkyl or 2-22C alkenyl;  $R_{<2>-}$  = H or 1-22C alkyl;  $R_{<3>-}$  = 1-22C alkyl, 2-22C alkenyl or the di-, tri- or tetra-valent residue of an opt. unsaturated aliphatic alcohol;  $R_{<4>-}$  = ethylene (or ethylene and propylene or butylene if  $y = 2, 3$  or  $4$ );  $R_{<5>-}$  = 1-22C alkyl;  $x = 2-20$ ; and  $y = 1-8$ . Pref. (A) is the alkali salt of an alkylphosphonic acid alkyl ester, pref. a K salt of a mono- and/or di-(8-20C alkyl)-phosphonic acid ester, or esp. pref. an alkali salt of a mono- or di-alkyl phosphate.

## IPC 1-7

**D06M 13/17**; **D06M 13/224**; **D06M 13/372**; **D06M 13/288**; **D06M 13/292**

## IPC 8 full level

**D01F 11/08** (2006.01); **D03D 15/00** (2006.01); **D04B 1/00** (2006.01); **D04H 1/42** (2012.01); **D04H 1/4342** (2012.01); **D04H 3/009** (2012.01); **D06M 13/02** (2006.01); **D06M 13/17** (2006.01); **D06M 13/224** (2006.01); **D06M 13/244** (2006.01); **D06M 13/282** (2006.01); **D06M 13/288** (2006.01); **D06M 13/292** (2006.01); **D06M 13/295** (2006.01); **D06M 15/53** (2006.01); **D06M 101/00** (2006.01); **D06M 101/16** (2006.01); **D06M 101/30** (2006.01); **D06M 101/34** (2006.01); **D06M 101/36** (2006.01)

## CPC (source: EP US)

**D04H 1/42** (2013.01 - EP US); **D04H 1/4342** (2013.01 - EP US); **D04H 3/009** (2013.01 - EP US); **D06M 7/00** (2013.01 - EP US); **D06M 13/17** (2013.01 - EP US); **D06M 13/224** (2013.01 - EP US); **D06M 13/288** (2013.01 - EP US); **D06M 13/292** (2013.01 - EP US); **D06M 13/295** (2013.01 - EP US); **D06M 2101/36** (2013.01 - EP US); **D06M 2200/40** (2013.01 - EP US); **Y10T 428/2933** (2015.01 - EP US); **Y10T 428/2969** (2015.01 - EP US)

## Citation (search report)

- [DA] EP 0416486 A2 19910313 - DU PONT [US]
- [DA] EP 0423703 A2 19910424 - DU PONT [US]
- [A] EP 0547846 A1 19930623 - MILLIKEN RES CORP [US]
- [DA] UNBEKANNT: "Processing finish for amorphous aramid staple", RESEARCH DISCLOSURE, no. Zusammenfassung 21901, July 1982 (1982-07-01), pages 239 - 240, XP000676481

## Cited by

CN111334888A

## Designated contracting state (EPC)

DE ES IE NL

## DOCDB simple family (publication)

**DE 4402193 C1 19950601**; EP 0665323 A2 19950802; EP 0665323 A3 19970820; JP H07229059 A 19950829; US 5478648 A 19951226

## DOCDB simple family (application)

**DE 4402193 A 19940126**; EP 95100370 A 19950112; JP 1029395 A 19950126; US 37744695 A 19950124